# The Department of Microbiology

# History of the Department of Microbiology

# Era 1 1960 – 1982 Establishment of the Department and buzz of the early years

The teaching of Microbiology commenced in 1964 as the first batch of Peradeniya students reached their 3<sup>rd</sup> year. The teaching was initially carried out under the direction of Professor Chapman, Professor of Microbiology, Faculty of Medicine, Colombo. Dr. S.N Arseculeratne, on his return after postgraduate studies



Prof Chapman

Prof Arseculeratne

in 1965 was appointed Lecturer – in Charge, Department of Bacteriology and moved to Peradeniya to begin the Department of Microbiology.

1975-1984 was a key period for recruitment of academic staff, with Dr. J.S.M Peiris and Dr.F.X Emmanuel. recruited as lecturers in 1975 and Dr. V.

Theyanesam in 1976. All three were alumni of the Faculty of Medicine Peradeniya, University of Ceylon and probably breaking some record, were from the same batch which began their medical course in 1967. All three continued their careers as microbiologists - Dr Emmanuel (FRC Path, PhD) to remain in UK,



Prof Thevanesam



**Prof Peiris** 

Dr Peiris (FRC Path, DPhil) return to Sri Lanka after obtaining his DPhil from Oxford in 1982 and rather belatedly, Dr Thevanesam (DM, MRCP,

FRC Path) to return in 1989. Dr Melvin Pinto

(PhD), also an alumnus, and Dr Sriyani Makulolowa were recruited to the Department in 1979 and 1984 respectively.



Mr Navaratnam

Professor Arseculeratne. architect of the early development was responsible for establishing the research ethos of the department and with the able help of Mr Navaratnam, Mr Weliange and Mr Dasan, ran the undergraduate teaching programme and a very active research programme with minimal resources. Dr Pinto working with mycobacteria



Mr Dasan



Mr Weliange

and Dr Upali Samarajeeva on aflatoxins obtained their PhD and Dr Thevanesam, working on the immunology of typhoid

obtained her DM during this period. Dr Pinto took over as Head of Department



Prof Pinto

from Prof Arseculeratne in 1983 and continued in this post till 1989 when conditions in the country forced him to move his family to safer climes. Dr Peiris remained in his post till 1988 during which time he developed virology while contributing to the

undergraduate teaching of not only medical students in Peradeniya but also students at Karapitiya as the Lecturer in Microbiology was on study leave.

#### Era 2 1982 – 1989 Development of virology and heyday of research

The setting up of the virology laboratory under the direction of Dr. Sriyal Peiris was the major achievement of the Department during this time. Equipment and consumables needed for virology and cell culture had to be purchased, thus there was an urgent need to look for funding. Cell culture work was started by making culture media in the laboratory. Excellent support with practical advice was received from Dr Hilary Fernando of the Veterinary Research Institute and innovative approaches were used to achieve the desired ends. While there were many technicians and lab attendants who were crucial to these efforts, Mr. Gamini Gunasekara (who later left to join the photographic unit), Mr.S.B Abyekoon and lab attendants Mr P.G.Abeyratne and Nimal Karunaratna, and support staff Mr. B.G Wimalasena were crucial in forming the core staff for the virology unit. Dr Peiris secured a research grant from the Wellcome Trust to start work on arbovirology in Sri Lanka. The research activities during this period followed three major directions described by Prof Sriyal Peiris in turn for coherence although they essentially ran concurrently.

<u>Diarrhoeal diseases</u>: Studies on the viral aetiology of diarrhoea in children was started using rotavirus ELISA assays with financial support from NARESA. These studies documented the role of rotaviruses and bacteria in paediatric diarrhoea. Aqa Mohammad, a veterinary student from Afghanistan who was doing his M Phil on *E coli* diarrhoea in calves, under the supervision of Dr E.A Wijeywanta and Dr S.Mahalingam, at the Faculty of Veterinary Science faculty needed help and collaboration on looking at enterotoxigenic E coli diarrhoea in calves. Aqa Mohammad completed his study during which he detected atypical cytopathic effects, which was found to be caused by a novel toxin, the Verocytotoxin.

Arboviruses: Around 1982, I met up with my school-mate and friend Shantha Amerasinghe (sadly now deceased) at the Department of Zoology who was studying mosquito taxonomy and mosquito vectors of disease in Sri Lanka. Given my interest in arboviruses, it was logical to set up studies on mosquito vectors and arboviruses. We had discussions on this topic with Dr Manel Wijesundera in the Department of Parasitology with regard to malaria. We successfully secured a BOSTID research grant to study the "Vector biology and Vector competence of man biting mosquitoes in the Kandy area and the Mahaweli Irrigation Scheme" which served to consolidate the infrastructure of the new virus laboratory. The team was later joined by Priyani Amerasinghe, Parakrama Perera (a veterinarian so impeccably dressed that I initially doubted whether he would be up to getting his "hands dirty", fears that were happily not realised) (M Phil) and Chinniah Arunagiri (another vet graduate) (PhD).

While these studies were well under way, in October 1985, a major outbreak of encephalitis was reported from General Hospital Anuradhapura. This was quickly confirmed to be caused by Japanese encephalitis virus. Working with the consultant physician at General Hospital Anuradhapura and the epidemiologist Nihal Abeysinghe we provided IgM serology diagnostic testing for patients and set-up studies that identified mosquito vectors responsible and demonstrated the role of pigs as amplifier hosts in this outbreak. This information was conveyed to authorities at the Mahaweli System C who were planning to promote pig husbandry in the new System C irrigated areas and helped avert major outbreaks of Japanese Encephalitis in this region. Overall, these studies documented the ecology and epidemiology of a number of arboviruses including Japanese Encepahlitis.

dengue (activity was very low in Kandy at that time) and Chikungunya (activity absent at that time) and documented a number of other arboviruses and their arthropod vectors for the first time in Sri Lanka.

Malaria: Dr Kamini Mendis at the Department of Parasitology, Faculty of Medicine Colombo in 1983 wished us to collaborate on a study to raise monoclonal antibodies to *Plasmodium vivax*. This was a tall order as our cell culture facilities were rudimentary and *Plasmodium vivax* was not cultivable. Dr Mendis's persuasive powers prevailed and we took on the task. Two PhD students Sunil Premawanse and Preethi Udugama (now Randeniya) joined me in Peradeniya for this project which was funded from the WHO TDR and other funding sources, which further helped develop infrastructure of the laboratory. This project led to a panel of monoclonal antibodies to the asexual and gametocyte stages of *P vivax* that allowed the identification of proteins associated with transmission blocking immunity on gametocytes and antigenic diversity of asexual stages.

The greatest output of an academic unit is the junior staff it has mentored and trained. Aqa Mohammad successfully completed his M Phil and then his PhD and is now working as a veterinarian in Melbourne. Parakrama Perera is a highly successful researcher based at Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, USA, and we continue to collaborate in research. Chinniah Arunagiri is a veterinarian in Queensland Australia. Sunil Premawanse and Preethi Udagama (now Randeniya) are professors at the University of Colombo. (Contributed by Professor Sriyal Peiris)

# Era 3 1989-2011 Continuing during hard times and developing clinical microbiology

*Prof Thevanesam writes:* The beginning of this period was one of great turmoil in the country and its effect on the Department was near catastrophic. Professor Arseculeratne left for Malaysia in 1984, Professor Peiris for Hong Kong in 1988 and Professor Pinto for Australia in 1989. Dr Makuloluwa was in UK on leave and eventually decided to remain in the UK. I rejoined the department in 1989 and was left with no academic staff in 1990 when the Universities resumed work and students returned to continue their vastly disrupted studies. The next 10 years was a haze of getting the backlog of students cleared, at some points having to teach 3 batches of students (both medical and dental). Professor Arseculeratne returned to the Department from 1990 to 1994 which was of immense help. Help for the teaching programme was also obtained from temporary staff and research students but over 90% of the teaching had to be done by me. The teaching load also included dental student teaching which was entirely undertaken by the Faculty of Medicine since the inception of the Faculty. The contribution of the non academic staff to the success of the undergraduate teaching programme cannot be overemphasized. The inputs of Mr Eriyagama, Mr Pemasinghe, Mrs Gamage, Mr Abeykoon, Mr Ekanayake, Mr Wijedasa (Technical Officers), Mrs Wijekoon (Clerk) and Manzil Bongso with the willing assistance of the laboratory attendants (headed by Mr Navaratne Banda and ably assisted by Mr Abeyratne, Mr.Nimal Karunaratne, Mr Jayasundera, Mr Paingamuwa, Mr Gunadasa, Mr Hemasinghe and labourer Mr Wimalasena, allowed the programmes and examinations to continue smoothly without disruption and their contribution is gratefully acknowledged. Pre-interns, research students, MD trainees also assisted in the programme during their stay.

The Department had contributed to the diagnostic services for the newly built Peradeniya Teaching Hospital but did not have an onsite laboratory. In 1989, with the help of Professor Panabokke, the Director of the Hospital Laboratory, a room was allocated for the diagnostic microbiology service and Mr Gunaratne (laboratory attendant) of the Department of Gynaecology and Obstetrics who had previously assisted me with my doctoral work was assigned to work in the laboratory. From such beginnings, this laboratory has now expanded to have 5 full time medical laboratory technologists

and has been one of the key sites for postgraduate training in microbiology.

Soon after my return, I was asked by the Pathologist, General Hospital Kandy (GHK) to help with setting up microbiology services at GHK. Although GHK had a microbiology laboratory, they had no consultant cover. Dr Beligaswatte, then Director of GHK officially requested my appointment as Honorary Consultant Microbiologist for GHK through the Director General, Health Services Dr Reggie Perera and the Vice Chancellor. I commenced work at GHK in mid 1989 and continued until a microbiologist was appointed to GHK in 2002. This small beginning had major implications for the development of clinical microbiology nationally but more of that later. Developing the microbiology and infection control services for GHK was a delight. Regular weekly Grand Ward rounds in the general and neurosurgical Intensive Care Units provided a forum for team care of seriously ill patients and gradual development of antibiotic and infection control policies. Under the direction of Dr Beligaswatte. an infection control committee was set up and 4 nurses appointed. Many small projects relating to clinical problems encountered were set up. The need for clinical microbiology in the country soon became very apparent to me and resulted in the investment of much time and energy towards the development of a suitable MD programme to train clinical



Standing: Technical staff - Mrs. Thilaka Gamage, Mr. Wijedasa, Mr. SB Abeykoon, Mr. Asela Ekanayake, Mr. NB Eriyagama, Mr. Pemasinghe Between the 2 - Mr. Nalin from Parasitology

Lab attendents/labourer: Mr. Nimal Karunaratne, Mr. Gunadasa, Mr. Hemasinghe, Mr. Wimalasena, Mr. Upali Paingamuwa, Mrs. Manel Wijekoon - clerk

Sitting: 2 pre-interns, Prof. Arseculeratne, Mr. Navaratne Banda, Prof. Thevanesam, Dr. Faseeha Noordeen, a pre-intern

microbiologists. The manpower resources for training were almost non-existent as the only state hospital to have a full time clinical microbiologist was NHSL and the microbiology services on offer were very limited. Jayawardenapura hospital, NHSL and Kandy and Peradeniya Hospitals were the only sites where clinical microbiology training could be given. The programme was begun and gathered momentum over the next decade. The programme was given a huge boost when Dr Beligaswatte was appointed Director General Health Services in 1999. During this period, the cadre in the health ministry was increased from 5 to 35! A task force in microbiology was set up for which I served as coordinator for almost 10 years. The Department of Microbiology, by allowing me the freedom to work with the PGIM and the Ministry of Health has had a long lasting impact on the initiation and establishment of the clinical microbiology services in Sri Lanka. The department continues to provide off site consultant services to Gampola, Nawalapitiya and Nuwara Eliya hospitals in addition to its service to Peradeniya hospital.

What about research during this era? Although academic staff were recruited to the department, during the period 1990 to 2010 the department functioned with a series of short term staff. They contributed to the teaching programme during their stay and several completed their MPhil degrees and left to continue their postgraduate studies. Only one (Dr Faseeha Noordeen PhD) returned in 2010! Since 2010,



Dr Faseeha Noordeen

the department has recruited 3 more academic staff and it is hoped that the staffing position of the department is now more secure. Several temporary staff also completed their MPhils. Dr Basista Rijal from Nepal, Dr Kalamathy Nagalingam from Jaffna and Dr Mathy Ambalavanar, also from Jaffna were 3 academics from other institutions who completed their MPhil degrees. A WHO grant, couple of NSF grants and numerous small grants from the University of Peradeniya provided the needed funds for these activities. A collaboration with the British Society of Antimicrobial Chemotherapy (BSAC) and Hospital Infection Society (HIS) resulted in several workshops and training programmes benefitting the department as well as the national initiative to improve the clinical microbiology and infection control services. A WHO twinning initiative with Dr Tim Inglis (Clinical Associate Professor -School of Biomolecular and Chemical Sciences, Faculty of Life and Physical Sciences, University of Western Australia. Medical Microbiologist - PathWest Laboratory Medicine-) provided an impetus to work on diagnostic applications in mycobacterial infections, melioidosis, leptospirosis and rickettsioses.



Resource persons for Infection Control Workshop. Leader of the team - Jeff Scott in centre



WHO Twinning initiative
Department staff with WestPath Team

With the return of Dr Noordeen, the discipline of virology is being revived and a molecular laboratory established. Mr Eriyagama and Mr Abeykoon received training in Prof Peiris's Laboratory in Hong Kong to help establish these laboratories. An antibiotic research laboratory has also been established which allows researchers from other institutions (IFS, Departments of Chemistry and Botany, Faculty of Science and AGBD) interested in examining the antimicrobial activity of plants and Ayurvedic products to carry out their work. Asela Ekanayake, Technical Officer received training in the UK (through the BSAC collaboration) in antimicrobial sensitivity testing, which has been essential for this work.

#### Undergraduate teaching and curriculum development

The phenomenal growth in microbiology over the past 50 years has necessitated a huge increase in content, burdening the student with the need to remember the names of numerous microbes. The traditional curriculum, taught

from the outset to 2004 consisted of lectures, tutorials and practicals taught in the 3rd year and culminated in the 3rd MBBS Part 1 examination. Increase in student numbers and development of clinical microbiology resulted in more emphasis being placed on clinical rather than bench based microbiology. Clinically oriented OSPE was introduced and the viva scrapped, with the practical examination being held during the course. In 2004, with a major curriculum reform, the teaching of microbiology and parasitology were merged into a common module, named 'Infection'. The first 5 years of the new curriculum has been a period of dynamic change in teaching where initially microbiology was taught in all 5 years. After 5 years of evolution, the programme is now well in place. Infection I consisting of General Microbiology and Systematic Microbiology is taught in Semester 4 (preclinical) and Infection 2 (Clinical Microbiology) in Semester 8 (alongside clinical appointments). Immunology (renamed Defenses of the body) is taught as a separate module in Semester 5 as a truly integrated course with the teaching panel including immunologists from Departments of Anatomy, Physiology and Paediatrics and Microbiology. Antibiotics are also taught in Semester 5 in collaboration with the Department of Pharmacology. Modes of teaching too have changed with small group discussions (SGDs) -a student centered activity – replacing tutorials, introduction of student seminars and Directed Self Learning (DSL) activities where students are given questions to answer and discuss with staff members. All teaching-learning activities are evaluated by regular student feedback and modified where needed. In addition, 3rd year students doing Clinical Pathology and final year students in their paediatric appointment also have formal teaching by microbiology staff who in addition supervise student research projects.

In the past 5 years, the Department of Microbiology has also contributed to the development as well as the teaching of students admitted to the newly set up Faculty of Allied Health Sciences. The Medical Laboratory Sciences (MLS) course continues to have a major input from the department and is our contribution towards developing the scientific infrastructure for the country.

In more recent years, the department has contributed to the teaching of virology to undergraduates in the Faculties of Veterinary Sciences and Allied Health Sciences. In addition, members of the academic staff have contributed to both teaching and examinations of the Faculties of Medicine in Jaffna, Eastern University and Rajarata University.

Over the past 50 years some interesting concepts employed by the Department include the new student seminars, the questions set by Professor S.N.Arseculeratne which promoted original thinking of the students and more lately the laboratory based rotation of MLS students which assists in their portfolio development.

A constant struggle in curriculum development has been to balance rapidly expanding knowledge in Microbiology and Immunology within the given time without overburdening students. This would remain true in the future and the curriculum would continue to require a dynamic balancing act in years to come.

#### Postgraduate teaching

The Department of Microbiology with the Microbiology laboratories in General Hospital, Kandy (teaching) and Teaching Hospital, Peradeniya has been one of the foundational units for the training of postgraduates in the PGIM run MD in Medical Microbiology programme. From the mid 1990's, the majority of trainees in the programme were based in one or other of these stations necessitating a heavy investment of time and energy. The 3 week initiation programme of the Diploma in Microbiology, and the 2 week antibiotic and infection control workshops in the MD programme were held in the Department for almost a decade before it was possible to transfer them to other institutions in the country. Several MD research projects were also carried out during this period. MD examinations were also conducted very successfully in the Department over this period of time. The role of the Department in developing the clinical microbiology services for the country is one we can be justly proud of. In addition, the Department of Microbiology has assisted in the Diploma in Pathology training programme conducted by the Board of Study in Pathology. Numerous pathology trainees have spent 4-6 weeks training in microbiology, again, to the benefit of the national laboratory services.

From the Department of Microbiology and through the PGIS, we teach students in the MSc in Plant Sciences and launched an MSc in Medical Microbiology to meet a need for a scientific infrastructure in microbiology. We are just completing the 3<sup>rd</sup> programme and the feedback is that the programme fills a felt need! We hope to continue and improve this programme with the assistance of microbiologists within and outside the university system. We have also initiated a society for microbiology – The Sri Lankan Society for Microbiology – and the Sri Lankan Journal of Infectious Diseases to provide a space for discussion, collaboration and encouragement of those with an interest in microbes.



An MSc in Plant Sciences practical session

# Teaching of other courses, Workshops and In service training programmes

Medical laboratory Technologists from the MLT school in Peradeniya have benefitted from bench training in the department since it's inception. In addition, various training programmes in microbiology techniques have been held regularly in the past 2 decades. The department has also assisted in the training of Public Health Inspectors (PHI) annually at the invitation of their training school in Kadugannawa.



Mycology training of technical staff and doctors by Dr Geethanie Fernando

Over the past 20 years, several in-service training programmes have been conducted for medical laboratory technologists in the state and private sectors. There is a great demand for such training programmes and it is anticipated that the department would continue to provide courses to

improve the quality of diagnostic microbiology. Teaching of microbiology in vastly different arenas including nurses in ICU and renal units, infection control to different categories of staff in health care institutions has been part of academic and technical staff activity. Assisting the newly established Sri Lanka Accreditation Board as an assessor and member of their technical advisory committee has also been a national contribution undertaken by Prof Thevanesam.

#### National contribution to laboratory quality

Prof Thevanesam has been associated with the Sri Lanka Accreditation Board (SLAB) since its inception, having received training as an assessor for accreditation over 15 years ago. She serves in the Technical advisory Committee on medical/clinical testing as well as on the Expert Committee on Microbiology. The upgrading of diagnostic laboratories to meet quality requirements is a key requirement and it is hoped that the department will continue to work with SLAB in achieving this goal.

#### Nostalgia

In the midst of a busy work load, there was always time for people! The Department has over the years developed the practice of holding a 'Departmental Day' to reflect on the work, the triumphs and difficulties of the year. It is celebratory in character and provides opportunities for others to share our achievements. It also allows us to develop an 'institutional' memory of all those who spend time in the department – undergraduate and postgraduate students, resource persons, those who work short term either on research projects or have some bench training – in a Departmental Year book.



Departmental Year Books



Prof Kapila Gunasekera – VC being greeted by Mr Abeyratne on Department Day . Dean – Prof Chula Goonesekera also present

New Year 2004 Prof Arseculeratne being greeted by Mr Wimalasena

# Farewells to Prof Arseculeratne on his retirement -2004



A farewell at Lady Hill



A song by students to say good bye!

# The future

With the return of Dr Noordeen and the recruitment of young capable academic staff, Dr. Veranja Liyanapathirana, Dr. Nilanthi Dissanayake and Dr. Champa Ratnatunga, and with replacement of technical and other support staff following retirement of departmental stalwarts, the Department of Microbiology looks forward to the foreseeable future with excitement.



Veranja



Nilanthi



Champa



Athula



Sunil



Karunadasa



Jayathilaka



Niroshani

### Postgraduate Research Degrees 1962 - 2011

### Supervised by Prof. S.N Arseculeratne

D.D.M.R.M. Pinto (PhD. UOP 1974)
 Upali Samarajeewa (PhD UOP 1975)
 V Thevanesam (DM. UOP 1984)
 D N Atapattu (M.Phil. UOP 2000)
 A study of some aspects of mycobacterioses in Ceylon
 Mycotoxins in coconut based human and animal foodstuffs
 A re-assessment of the bacteriological, clinical and immunological features of typhoid fever in Sri Lanka
 Immunological studies on rhinosporidial endospores

#### **Supervised by Prof JSM Peiris**

A.Mohammad (M.Phil. UOP 1985) Studies on the bacteriology of *Escherichia coli* strains from calves (*Bos* taurus) and buffalo calves (Bos bubalus bubalis) in Sri Lanka with special reference to their enterotoxin production and antibiotic sensitivity patterns. Survey of Mosquito borne arboviruses in an urbanised environment and an • L.P.Perera (M.Phil. UOP 1986) area under agricultural development. Studies on vero (shiga) and LT toxin producing Escherichia coli infections A.Mohammad Tokhi (PhD. UOP 1988) in animals and man WMS.Premawansa<sup>1</sup> (PhD. UOC 1988) A study of transmission blocking immunity in *Plasmodium vivax*: An immunological investigation of gametes using monoclonal antibodies P.Udagama<sup>1</sup> (PhD. UOC 1989) Plasmodium vivax: Asexual stage antigens C.K.Arunagiri (PhD. UOP 1990) Epidemiology of Arboviruses in Sri Lanka

### Supervised by Prof V Thevanesam

M.A.D.B. Navaratna (M.Phil. UOP 1994) Bacterial aetiology of pneumonia in children with special reference to the prevalence of Staphylococcus aureus S Jevaseelan (M.Phil. UOP 1996) Rapid diagnosis of typhoid in a poorly resourced clinical microbiology laboratory B. Prasad Rijal (M. Phil UOP 1997) Development and assessment of methods of characterization of urinary pathogens suitable for developing countries and correlation of such characteristics with antibiotic use in hospital and community A.T. G Fernando (M.Phil. UOP 1998) Clinical and laboratory diagnosis of (Standard agglutination test and isolation of organisms in blood urine and stools) typhoid fever in adults in Peradeniya Hospital -Sri Lanka The profile of microorganisms and biofilms in patients with (M.Phil. R.W.M.R.K.K. Ranasingha UOP 2005) ischaemic lower limbs K. Nagalingam (M.Phil. UOP 2006) A clinical and diagnostic study of Rickettsial disease in Nawalapitiya hospital and application of PCR technique for Rickettsial disease mapping in Sri Lanka • U.N.D Kanakaratne<sup>2</sup> (PhD. UOP 2009) Severity of Dengue disease and the role of different serotypes and genotypes of the causative viruses M Ambalavanar<sup>3</sup> (M.Phil UOP 2010) Identification of drug resistant Mycobacterium tuberculosis strains using PCR and DNA sequencing • V Liyanapathirana<sup>4</sup> (M Phil UOP 2011) Diagnosis and mapping of rickettsial diseases in Sri Lanka using

molecular and serological techniques

UOP – University of Peradeniya UOC – University of Colombo

Prof SNA – Prof SN Arseculeratne; Prof JSMP – Prof JSM Peiris; Prof VT – Prof V Thevanesam

<sup>1</sup>Co supervised with Prof K Mendis – University of Colombo

<sup>2</sup>Co supervised with Dr K Gunasekera (GeneTECH) and Prof A de Silva (University of N Carolina)

<sup>3</sup>Co supervised with Dr D Maganarachchi – Institute of Fundamental Studies, Kandy

<sup>4</sup>Co supervised with Dr.P.Sarawanakumar – Department of Botany

### MD in Medical Microbiology projects supervised by the Department of Microbiology

•	Dhammika Atapattu	2000	Aetiology and sequential changes of C reactive protein in intracranial
			Abscesses
•	Geethanie Fernando	2000	Comparison of antibiotic susceptibility results obtained with break-
			points, MIC and disc methods
•	Kumari Obeysekera	2000	A study of nosocomial infections among mechanically ventilated patients
			in surgical intensive care unit, GH Kandy

#### MSc in Plant sciences / Medical Microbiology projects supervised by the Department of Microbiology

•	W.M.N.M Wijesinghe	1999	Antimicrobial activity of xanthones from Calophyllum species against MRSA
•	P.K.I.D Jayasinghe	2006	Activity of 2 medicinal plants against some bacteria causing skin and wound infections in humans
•	G.M. Mala Perera	2006	Antimicrobial activity of the water decoctions of the constituent plants of the Ayurvedic drug Panchawalka and medicinal plant <i>Abuliton indicum</i>
•	E.H.R.K. Ranasingha	2009	Isolation of Listeria monocytogenes from ready-to-eat food products
•	N.D. Gunawardana	2009	Molecular identification of Methicillin Resistance and Virulence marker in <i>Staphylococcus aureus</i>
•	M.B. Amunugama	2010	Comparison of clinical and laboratory parameters in the early diagnosis of dengue fever
•	T.N. Senaratne	2010	Establishing a rapid isolation method for Mycobacterium tuberculosis
•	M.Abeykoon	2010	Microbiology of abscesses with special attention to <i>Burkholderia Pseudomallei</i>

#### MD in Community Medicine projects supervised by the Department of Microbiology

•	S Agampodi	2011	An Epidemiological study on leptospirosis among patients admitted to
			government hospitals in leptospirosis endemic areas in Sri Lanka

#### Academic staff - 1962 - 2011

Prof S.N.Arseculeratne (1967 – 200 4; 1990 – 1994); Prof D.D.M.R.M Pinto (1979 – 1989); Prof J.S.M. Peiris (1974 – 1988); Dr S.F.X. Emmanuel (1974 – 1977); Prof V. Thevanesam (1975 – 1984; 1989 – to date); Dr. S.F. Makuloluwa (1984 – 1990); Dr D.N. Atapattu (1992 – 2008); Dr. Nirmala Herath (2001 – 2005); Dr F Noordeen (2002 – to date); Dr.A.P.Kodituwakku (2004 – 2007); Dr. Kanchana Ranasinghe (2004 – 2007); Dr. B. Sathanathan (2004 – 2005); Dr V Liyanapathirana (2009 – to date); Dr N Dissanayake (2010 – to date); Dr C Ratnatunge (2011 – to date).

Staff recruited in the early years for whom exact dates of recruitment and departure are not available: Dr AF Doss, Dr Paramagnanam, Dr LMD de Silva, Dr V M de Mel

#### Technical staff - Past and present

Mr. C. Navaratnam (1965 – 1986); Mr. P.Dasan (1966 – 1984); Mr. L.V.Weliange (1969 –1982); Mr. P. K. Athauda (1976 – 1979); Mr. J.W.Premadasa (1978 – 1979); Mr. W.G.G.Gunasekara (1978 – 1985); Mr.Y.H.Pemasinghe (1975 – 2005); Mr. S. Basanagala; Mr. A.Wadigamagawa (1992-1997); Mr. K.G.Gunadasa (1968-2003);

Mr.W.M.Heenbanda (1968 - ?); Mr. Nawaratne Banda (1968-2003); Mr. J.M.Jayasundara (1973-1997); Mr. P.G.Abeyratne (1978-2011); Mrs. C. R. Peiris (1985 – 1990); Mr.N.B.Eriyagama (1978 – to date); Mrs. T.M.Gamage (1983 – to date); Mr. A.M.S.B.Abeykoon (1985 – to date); Mr.E.W.M.A.Ekanayake (1985 – to date); Mr.M.H.Wijedasa (1997 – to date); Mr. K.G.R.Athula Kumara (2006 – to date);

#### Clerical staff & Staff Assistants

Mr. A. Mediwaka (1981 – 1985); Mrs. Manel Wijekoon (1985 – to date)

#### Support staff - Past and present

Mrs. K. A.A. Kumarasinghe (1979 - ?); Mr.B.G.Wimalasena (1980 to date); Mr. P.L.Ariyasena (1980 - 1982); Mr. A.G. Podiappuhamy (1980 - 1980); Mr. K. Wellasamy (1980 - ?); Mr. W.N.Karunaratne (1982 - 2009); Mr. A.W.A.P.B.U. Paingamuwa (1983 - 2009); Mr. H.A.S.K.Hemasinge (1992 - to date); Mr. H.G.S.Karunaratne (2005 - to date); Mr. E.G.Karunadasa (2006 - to date); Mr. W.M. Jayathilaka (2010 - to date); Mrs. W.M.K.Niroshani (2010 - to date)